



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,475	02/06/2002	Roger A. Stern	16904-753	3000
25213	7590	01/03/2005	EXAMINER	
HELLER EHRMAN WHITE & MCAULIFFE LLP 275 MIDDLEFIELD ROAD MENLO PARK, CA 94025-3506			PEFFLEY, MICHAEL F	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/072,475

Applicant(s)

STERN ET AL.

Examiner

Michael Peffley

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20-28, 30-55, 58, 60-67 and 69-110 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 18, 20-24, 26-28, 30-55, 58, 60-67, 69-84, 93-101, 108 and 109 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16, 85-92, 102-107 and 110 is/are rejected.
- 7) ☒ Claim(s) 5 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/8/04; 11/12/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 3739

Applicant's amendments and comments, received November 4, 2004, have been fully considered by the examiner. The following is a non-final Office action and is fully responsive to the communication of November 4, 2004.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

Claims 1-4, 6-10, 14, 15, 85-91, 102-107 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers (5,496,314) in view of the teaching of Arts et al (5,702,387).

Eggers provides a device which comprises a handpiece (13) having an insert (11) detachably coupled to the handpiece. The insert includes an RF electrode (12) which is comprised of a dielectric portion and conductive portions (Figure 3A-4B). Eggers et al also disclose providing a cooling fluid from the handpiece through the insert and to the electrode. A valve (17) is located in the handle assembly. The examiner maintains that the fluid delivery system is capable (i.e. "configured to") deliver a controllable amount of fluid in pulses through operation of the valve. It is noted that the distal exit of the insert may be interpreted to be both a nozzle for the fluid delivery and a vent. Eggers further teach the use of a dielectric coating on the electrode to provide a "non-stick" coating property for the portion of the electrode contacting tissue (see col. 7, lines 13-30). Eggers et al does not specifically teach of a dielectric coating on the electrode through which electrical energy is delivered to the tissue.

Art Unit: 3739

Arts et al provides a general teaching that it is known to provide electrosurgical electrodes with a dielectric coating to reduce edge effects of RF energy being delivered to tissue. The coating is a dielectric material which covers the entire electrode and has thinner portions through which RF energy is delivered.

To have provided the Eggers electrode with a dielectric coating to reduce edge effect currents and provide capacitive coupling between the electrode and the tissue would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Arts et al.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingle et al ('749) in view of the teaching of Arts et al (5,702,387).

Ingle et al disclose a device which includes a handpiece assembly (46 – Figure 5) with an insert (42) detachably coupled to the handpiece housing. The insert includes an RF electrode (12) which includes a conductive portion (12a, 12b, 12c) and a dielectric portion (i.e. support member). There is also a fluid delivery member (52) for delivery of fluid to the backside of the electrodes (col. 10, lines 14-22). As with Eggers, Ingle et al fail to disclose a dielectric coating on the electrode surface through which RF energy is delivered to tissue.

Arts et al provides a general teaching that it is known to provide electrosurgical electrodes with a dielectric coating to reduce edge effects of RF energy being delivered to tissue. The coating is a dielectric material which covers the entire electrode and has thinner portions through which RF energy is delivered.

Art Unit: 3739

To have provided the Ingle et al electrode with a dielectric coating to reduce edge effect currents and provide capacitive coupling between the electrode and the tissue would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Arts et al.

Claims 16 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers (5,496,314) and Arts et al (5,702,387) and further in view of the teaching of Negus et al ('848).

As addressed previously, Eggers provides a device comprising a handpiece and a detachable insert coupled to the handpiece. There is a valve means (17) located on the handpiece for controlling the flow of fluid through the handpiece and the insert and to the electrode. Eggers discloses a simple push valve, and fails to specifically disclose a solenoid valve. The examiner maintains that the use of solenoids as valves is generally well known and would be an obvious substitution for the Eggers push valve to serve the same purpose.

With specific regard to claim 92, Eggers fails to disclose the use of a force sensor to determine the amount of pressure being exerted by the probe. Negus et al disclose an electrosurgical probe which may include a pressure sensor (col. 2, lines 46-57) for sensing the force with which the probe contacts tissue.

To have used any well known type of valve (e.g. solenoid valve) to control the flow of fluid in the Eggers device, as modified by the teaching of Arts et al, would have

Art Unit: 3739

been an obvious modification for one of ordinary skill in the art at the time of the invention. Additionally, to have provided the Eggert device with a force sensor to monitor the pressure the probe exerts on tissue would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Negus et al.

### ***Allowable Subject Matter***

Claims 17, 18, 20-24, 26-28, 30-55, 58, 60-67, 69-84, 93-101, 108 and 109 are allowable over the prior art of record.

Claims 26, 27, 76, 77 and 81-83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3739

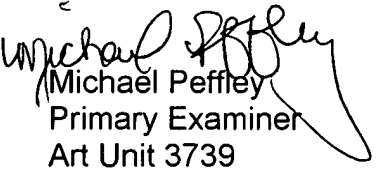
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael Peffley  
Primary Examiner  
Art Unit 3739

mp  
December 27, 2004